The Chemical Weapons Convention

Questions Facing the U.S. Defense Industry

This pamphlet is the eighth presentation in a series about the Chemical Weapons Convention and its potential impacts prepared by the On-Site Inspection Agency to increase ***Readiness Through Awareness*** of the defense industry. Additional copies of this pamphlet and cost-free materials about other arms control agreements and treaties are also available from OSIA.

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Introduction

Under the Chemical Weapons Convention (CWC), a number of industrial facilities will be subject to verification and systematic on-site inspections based on declared chemical production, consumption, or processing. Even if you are not a declared activity, your facility could be the subject of a CWC challenge inspection by an international inspection team investigating an allegation of non-compliance. Although challenge inspections will be the exception, many of the questions that have been asked by defense contractors have been directed toward this worst case, low probability event.

Consequently, this pamphlet answers many vital questions regarding challenge CWC inspections. Many of the issues are applicable to systematic inspections as well. Through the Defense Treaty Inspection Readiness Program (DTIRP), the Government can provide your facility with guidance on how best to protect against undesired release of proprietary or otherwise sensitive information. While the impact of CWC inspections on U.S. sites will vary, asking the right questions and taking advantage of government assistance can help reduce any adverse affect on your facility.

Questions

What is the number of Convention signatories?

The Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and Their Destruction, more commonly known as the Chemical Weapons Convention (CWC), was opened for signature in January 1993. Since then, 160 nations, including the United States, have signed it.

When will the Convention enter into force?

The Convention will enter into force 6 months after 65 nations ratify it. The exact date depends upon how quickly the signatories complete their domestic ratification processes. The ratification process began in the United States on November 23, 1993, when President Clinton endorsed the Convention and formally submitted it to the Senate for its advice and consent to ratification. As of early 1996, U.S. ratification is still pending. Current Department of Defense planning assumes an entry-into-force date sometime in early 1997

Who will be in charge of implementing the Convention?

The Organization for the Prohibition of Chemical Weapons (OPCW) is the international body created to oversee implementation of the CWC. From its headquarters in The Hague, Netherlands, the OPCW will include a Technical Secretariat comprised of international civil servants. Within the Technical Secretariat, the Verification Division and its staff of over 140 inspectors will conduct CWC inspections. Their job during these inspections will be to observe and report information to the OPCW.

Each inspector will first go through a rigorous nomination and acceptance process by the OPCW. Then, the State Parties will review the OPCW's list and either accept or reject each inspector. Those who are rejected by the U.S. Government are not permitted to participate in any verification activities on U.S. territory, or in any place under U.S. jurisdiction or control. Those who are accepted may examine any site. The U.S. Government may also change its mind and object to a previously approved inspector. However, the United States cannot have the OPCW remove any inspector already designated for or involved in an inspection.

What types of chemicals are prohibited by the Convention?

The CWC prohibits any toxic chemical agent, regardless of origin, that interferes with life processes and does not have legitimate applications in

the quantities in which it is produced. This ban applies to all conceivable chemical weapons (CW) agents, even those as yet undiscovered or not currently found on one of the Convention's three schedules, which list the specific chemicals, or chemical families, of concern. Scheduled chemicals range from actual chemical warfare agents to those intermediate compounds, or precursors, that can be converted in a few steps to known CW agents. Scheduled chemicals will be controlled according to their risk, as described below.

The CWC specifically prohibits all activities (except for closely monitored research and protective activities) involving the 12 Schedule 1 chemicals. These chemicals have no large-scale commercial use. They are either known chemical weapons (i.e., they have been developed, produced, stockpiled or used as such in the past) or their toxicity poses high risks to Convention goals. Examples include sulfur and nitrogen mustards, lewisite, and the nerve agents sarin, tabun, soman, and VX. Two biological toxins, saxitoxin and ricin, are also listed. Only a few U.S. companies currently make Schedule 1 chemicals for commercial purposes, such as pharmaceutical firms that produce nitrogen mustards or ricin immunotoxins for cancer chemotherapy.

On the other hand, the CWC closely monitors, but does not ban, Schedule 2 and 3 chemicals. Having low to moderate commercial utility, the 14 Schedule 2 entries are considered high risk because they can be used as, or to make, chemical weapons. Examples include PFIB, BZ, and thiodiglycol an immediate precursor of sulfur mustard. One Schedule 2 chemical family is estimated to include over 10,000 individual

chemicals. Companies that produce, process or consume Schedule 2 chemicals in quantities above annual threshold levels must declare the relevant plants and production volumes, and are subject to systematic inspections.

The last schedule, Schedule 3, contains so-called dual use chemicals. They have properties similar to those on Schedules 1 and 2, but are produced in large quantities for legitimate commercial purposes. Seventeen individual chemicals appear on Schedule 3, including some precursor chemicals that are several steps removed from CW agents, such as phosphorus trichloride, as well as some highly toxic gases (e.g., phosgene, hydrogen cyanide, cyanogen chloride) that were used as warfare agents in World War I. Companies involved in the manufacture of certain quantities of Schedule 3 chemicals will also face reporting and inspection requirements.

In addition to the Scheduled chemicals, the CWC's verification regime applies to other chemical production facilities which produce certain levels of unscheduled discrete organic chemicals. Discrete organic chemicals include those with the elements, phosphorus, sulfur, or fluorine, which are the basic ingredients for making chemical weapons. Facilities in this category do not actually produce any of the Schedule 1, 2 or 3 chemicals, but have the potential to do so. Therefore, they must be declared and are subject to annual reporting requirements. Only those facilities that produce pure hydrocarbons or explosives are exempt from the declaration requirement.

If a site does not use or possess any of the banned chemicals, can it be inspected?

Yes. Inspections do not depend upon a site's association with the banned chemicals on Schedule 1. As explained above, Schedule 2 and 3 chemicals are not banned. Nevertheless, declared Schedule 2 and 3 facilities are subject to inspection. Also, because the CWC requires all companies and relevant facilities that manufacture, process or consume Schedule 2 chemicals to be declared, various downstream users of Schedule 2 chemicals may have to file declarations and accept systematic inspections. This requirement can potentially affect companies in such diverse businesses as plastics, automobiles, aerospace, electronics, pharmaceuticals, paper, mining and photographic materials.

Additionally, any site, declared or not, may be subject to a short-notice, potentially intrusive challenge inspection. This type of inspection can occur when one party to the Convention suspects another of conducting prohibited activities, and asks the OPCW to conduct a challenge inspection at the location of concern. The OPCW will review such requests and dismiss those it deems frivolous. The challenged party, however, cannot refuse a challenge inspection.

How will a site be notified if it is selected for a challenge inspection?

The U.S. Government is still working out the details of this process. However, it is expected that a challenge inspection notice will be transmitted

electronically by the OPCW to the Department of State Nuclear Risk Reduction Center (NRRC). Then, depending on the type of site—private industry, DoD, DoD Contractor, or Government Contractor—the established response and oversight center designated within the Department of Commerce, Defense, or military service will conduct the notification, issue guidance and advise on any assistance that may be provided by the U.S. Government.

How much time will a site have to prepare prior to the arrival of the challenge inspection team?

At least 48 hours. The U.S. Government must receive the challenge inspection notice not less than 12 hours before the inspection team is scheduled to land at the point of entry (Dulles International Airport, Washington, D.C.). The challenged site will be notified as described in the preceding question. Then, another 36 hours will elapse before the inspectors arrive in the vicinity of the site. If the final inspection perimeter has not been agreed to, up to 72 hours are allocated for perimeter and inspection plan negotiations before the team must be permitted to cross the perimeter and begin the inspection.

Who, and how many, will be on the challenge inspection team?

Inspections will be conducted by an international team of inspectors recruited from the member states of the OPCW and assigned to the Technical Secretariat. Each inspection team will be tailored according to the challenge concern and the type of facility to be inspected. In the case of a challenge inspection, no personnel from the inspected State Party may be part of the team. Similarly, the country requesting the inspection may only send an observer with the inspection team. This observer is not an inspector, and therefore is not guaranteed the same rights as inspectors.

Inspectors may be drawn from the industrial, academic, and military (former or retired) chemical communities and have diverse national and substantive backgrounds. They will likely be knowledgeable about chemical processes and production, as well as program funding and supply documentation, and have relevant skills to conduct interviews, search computer databases and records, and perform any other possible inspection activities.

The CWC does not specify how large an inspection team may be. Team size will vary depending on the type of facility and how much ground the team intends to inspect. However, each team will likely have certain basic components.

The Team Leader and Deputy Team Leader will be technical experts who will be the team's execution and operation managers, respectively. The inspectors will

include subject matter experts with specialties related to the facility and equipment being inspected. As discussed above, they may be chemical engineers, analytical chemists, organic chemists, facility operations specialists, munitions handling and storage specialists, computer specialists, etc. The inspection team may also include interpreters who are fluent in English and the language spoken by the Team Leader. They will also be trained to observe and document data. Inspection assistants and technical support staff will complete the team. Designated by the Technical Secretariat to assist the inspectors, they may include specialists such as equipment operators/technicians, medical specialists, sealing and security specialists, health and safety specialists, and administrative personnel.

How long will the inspection team be on or in the vicinity of a site during a challenge inspection?

The total amount of time is about 7 1/2 days. Inspectors can be physically in the vicinity of or on site up to 72 hours before the inspection actually begins. During this time, they will conduct perimeter and exit monitoring activities, and negotiate the final perimeter, the inspection plan and the amount of access within the perimeter. The inspection team will then have a maximum of 84 continuous hours in which to complete all desired inspection activity inside the inspection perimeter. After-hours and even around-the-clock inspection activities may occur. After the

inspection, inspectors may remain on site an additional 24 hours to prepare their preliminary findings in written form.

Will the inspection team have access to the entire site?

Not necessarily. How much of a site will be inspected is defined by negotiations that begin when the inspectors land at the point of entry. There, the team will negotiate its requested perimeter with U.S. Government officials. The parties will work to determine the geographic boundaries of the request and to reconcile the team's diagram with the actual terrain of the requested area. These discussions will continue until agreement is reached on the final inspection perimeter.

Even inside the agreed final inspection perimeter, all access and activities are negotiated. While the United States is obliged to allow the greatest degree of access possible, inspector access to places or areas can be restricted based on concerns for national security, safety, or protection of proprietary information. If access is restricted, however, the site must demonstrate by alternative means that activities within the excluded places or areas are in compliance with Treaty requirements.

What are the specific guidelines for proposing an alternative perimeter?

A site may wish to propose an alternative perimeter. Whatever the reason—to facilitate the inspection, to protect classified, sensitive or proprietary information—the alternative perimeter must conform to specific guidelines. First, like the requested perimeter, it has to run at least 10 meters outside any buildings or other structures and cannot cut through existing security enclosures. It must also include all of the requested perimeter, with no part being excluded. Taking into account the natural terrain features and man-made boundaries, it should bear a close resemblance to requested perimeter. For instance, where a requested perimeter is roughly drawn, a proposed alternative perimeter could conform to existing roads, fence lines, waterways, and walkways. If a security barrier surrounds the site, such as a fence, the alternative perimeter should normally run close to it. Finally, at least two of the following three characteristics should apply:

- It should not extend to an area significantly greater than that of the requested perimeter;
- It should be a short, uniform distance from the requested perimeter; and,
- At least part of the requested perimeter should be visible from the alternative perimeter.

What types of collection mechanisms are available to the inspection team?

Inspectors have several means available to collect information relevant to the inspection mandate. Upon their arrival, they are permitted to go to the perimeter to monitor site exits and document all vehicles exiting by air, land and sea. Inspectors may use video cameras and written logs to do so. Also, outside the perimeter to a distance of 50 meters, the CWC allows inspectors to examine all areas, take wipes, air, soil, and effluent samples, and take photographs. Once the inspection begins and they are inside the final perimeter, inspectors may request to perform several activities which are subject to negotiation between the inspection team and the inspected State Party. These include examining all areas; interviewing facility personnel to establish relevant facts; reviewing pertinent facility records; having photographs taken; having wipes, air, soil and effluent samples taken; and recording observations during all of these activities. The inspection team also can perform on-site analysis of samples using its approved equipment.

Can the inspection team look at papers, data, records, etc., and if so, are there any limits as to what the inspection team can look at?

The answer to both questions is yes. If your facility is challenged, the inspection team's mission will be to observe, collect, and report information relevant

to its inspection mandate (which contains instructions regarding the requesting State Party's challenge). In order to gather sufficient information to satisfy their mandate, the inspectors will likely exercise their right to request to see anything related to the inspection mandate.

There are limits on what the site must let them see, however. Inspectors must strictly observe and refrain from activities that go beyond the inspection mandate. In other words, they have no right to look at items unrelated to the challenge concern. Questions as to whether items are indeed relevant will be resolved by continuing negotiations among the team, government and site personnel. Inspections based on vaguely worded mandates may make such negotiations more difficult. The site also need not permit those activities that unnecessarily hamper or delay facility operations or affect its safety.

Will the inspection team be permitted to interview facility personnel?

The inspection team has the right to interview any facility personnel in the presence of facility representatives. Personnel interviews should be willingly offered by the inspected facility to demonstrate cooperation and compliance. The information requested by the inspection team during such interviews, however, must be relevant to the conduct of the inspection. If questions posed during an interview fall outside the relevance of the inspection,

the inspected facility may object. If, in turn, the head of the inspection team believes such questions are relevant, the questions must be provided to the inspected facility in writing for reply.

What can a site do to limit the access of the inspection team?

During a challenge inspection, the United States Government must provide the greatest degree of access possible. It must also refrain from delaying or otherwise hindering the inspectors ability to exercise their functions. At the same time, the inspected Party has the right to protect national security and sensitive installations, and to prevent the disclosure of confidential information and data not related to chemical weapons. Therefore, the CWC's managed access provisions allow for means short of total, unimpeded access to demonstrate compliance.

The CWC lists several examples of permitted managed access measures. For example, a site may:

- Remove sensitive papers from office spaces
- Shroud sensitive displays, stores, equipment and pieces of equipment (e.g., computer or electronic systems)
- Log off computer systems and turn off data indicating devices

- Restrict sample analysis to presence or absence tests for specific Schedule 1, 2 or 3 chemicals (or appropriate degradation products)
- Use random selective access techniques whereby inspectors are requested to select a given percentage or number of buildings of their choice to inspect (this principle can apply to the interior and content of sensitive buildings, as well)
- In exceptional cases, give only individual inspectors access to certain parts of the inspection site

Sites are not restricted solely to these measures. For instance, they could request that inspectors stay between lane markings on the floor or follow a pre-determined route between and through buildings. Or they could permit them to view sensitive areas only from doorways or windows, or only at certain specified times. In all cases, however, managed access measures must be carefully thought out. Shrouding is a good example. Shrouding just one or two items could stand out and draw the inspection team's attention. At the other extreme, over-shrouding could prevent inspectors from gathering enough information to satisfy their inspection mandate.

Managed access also has an important caveat. Whenever inspector access is restricted, every reasonable effort must be made to demonstrate that any object, building, structure, container or vehicle to which access has been limited is not used for purposes related to the challenge allegation. For example, if a

sensitive item is shrouded, partial removal of the shroud is a possible way to demonstrate compliance. Managed access negotiations will take place between the inspection team and U.S. Government representatives throughout the inspection. Facility input to these negotiations is essential to ensure protection of facility interests. Nevertheless, if differences over the level of access arise that cannot be resolved on site, the final decision will be made by appropriate officials in Washington, D.C.

Are there any special requirements, as far as specific information or facilities, which the site must provide to the inspection team?

Yes. The inspected State Party will be expected to arrange or provide for standard amenities, to include on-site transportation, working space, lodging, meals, medical care, administrative services, and a dedicated phone line for inspectors to reach the Technical Secretariat or an Embassy.

Upon arrival at the site, and before the inspection begins, the inspectors must be briefed by facility representatives. The pre-inspection briefing should cover general information on the facility and activities carried out there, safety considerations (for personnel and equipment), and administrative and logistical arrangements necessary for the inspection. The site should also brief the inspectors on the availability of facility personnel and records. This briefing gives some guidance to the inspection team in planning their inspection, and allows the site to begin to establish

some influence over the perspective with which the inspection team views the site, vis-a-vis the allegation information of the Requesting State Party Observer. The pre-inspection briefing should respond to the noncompliance allegation and should attempt to describe the activity conducted within the requested or final perimeter as compliant and benign. The briefing should be as short as possible.

The site should also plan to provide the inspectors with facility maps and other helpful documentation. At least one map must be drawn to scale, showing all structures and significant geographic features at the site.

Where will the inspection team stay during the period of inspection and will they be monitored by U.S. personnel when not performing inspection activities?

Accommodations for the inspection team should be reasonably close yet at sufficient distance from the site to not inhibit or intrude on the site preparation process throughout the duration of the inspection. Although the team has a right to conduct inspection activities continually throughout the 84 hour period, this should not be viewed as an obligation to provide any sleeping accommodations on the inspected facility.

When not performing inspection activities, they will be hosted by U.S. personnel. As international civil servants with limited diplomatic immunity, inspection team members enjoy inviolability and protection of

their living quarters and office premises. The same is true of their papers and correspondence, including records.

Will the inspection team have equipment, and will it be inspected prior to being used during the challenge inspection?

Yes. The inspectors will bring with them equipment certified by the OPCW. U.S. Government personnel will inspect and verify it as OPCW-approved equipment when the inspection team arrives at the point of entry. This inspection will ensure that the equipment does not perform in a manner outside its intended purpose. All equipment to be used by the team will have to comply with safety and other underwriting licensing requirements. Exact equipment specifications are being developed by the OPCW, but potential types of inspection equipment include:

- Measuring equipment (scales, tape measures, levels, range finders, calipers, ultrasonic thickness gauges)
- Photographic equipment (still cameras, video cameras)
- Detector equipment
- Sample collection, preparation, and transfer equipment
- Sample screening equipment (radiographic, acoustic/ultrasonic, neutron interrogations)

- Sample analysis equipment (gas chromatography-mass selective detection, Fourier transform infrared spectroscopy, liquid chromatography)
- Equipment to mark and secure items (tamper-proof seals, marks, tags)
- Site location and identification equipment (Global Positioning System, maps, site diagrams, satellite photography, compass)
- Protective and safety equipment (personal protection, decontamination, safety clothing)
- Medical equipment and supplies (antidotes)
- Communications equipment (satellite link radios)
- Miscellaneous equipment (calculators, computers, tool kit, cassette recorders, power supply)

The OPCW also sees two additional equipment inspections occurring: at the site upon completion of the inspection and again at the POE upon the team's departure. The purpose of these inspections is to ensure that equipment was used as intended.

Will the United States provide any assistance to a site during a challenge inspection?

Yes. A host team consisting of a representative from the Office of National Authority, national escorts, a U.S. Government assistance team, representatives from your facility and other representatives, as appropriate, will be established to interact with the inspection team. The host team will, by consensus, address and resolve, to the extent possible, issues arising throughout the course of the inspection.

The government assistance team will be available to provide technical, treaty, and U.S. Government policy support. This team will assist in preparing the site, and will remain for the duration of the inspection.

There will also be U.S. Government personnel who act as the official escorts for an inspection team. If the procedures adopted for previous arms control treaties are followed, the On-Site Inspection Agency (OSIA) will provide these escorts. Their job will include much of the logistics support for inspection team members. This should include moving them to and from the point of entry to the vicinity of the challenged site, making arrangements for off-site food, lodging and security, and transporting them from the local airport to the site.

Who will cover costs associated with shutting down operations during a challenge inspection?

At present there are no provisions for reimbursement should a facility shut down operations. Early identification of this situation in the pre-inspection briefing may bring other options into play. The negotiation or managed access process for inspection activities within the perimeter permits a forum to apply common sense and reach agreement on alternatives other than shut down. An extension of the inspection to an off-cycle period may be one approach.

Conclusion

This pamphlet has provided simple answers to the what, when, why, who and how of CWC challenge inspections. These inspections may affect you, but help is available to assist you in protecting sensitive, national security and proprietary information. There are several things you should remember about the CWC:

- Since January 1993, 160 nations have signed the Convention.
- The Organization for the Prohibition of Chemical Weapons will oversee implementation of the CWC which will enter into force 6 months after 65 nations ratify it.
- Scheduled chemicals will be controlled according to their risk: Schedule 1 chemicals are banned chemicals under the Convention; Schedule 2 chemicals are precursors to the banned chemicals; and Schedule 3 chemicals are dual-use chemicals.
- Any facility can be inspected even if it does not use or possess any of the banned chemicals.
- Inspectors have several means available to collect information relevant to the inspection mandate but will not necessarily have access to your entire facility.
- During a challenge inspection, you must provide the greatest degree of access possible, but may use managed access procedures to prevent the disclosure of information not related to the inspection mandate.

- You will be expected to help arrange or provide for standard amenities, such as on-site transportation, working space, lodging, meals, medical care, administrative services, and a dedicated phone line for inspectors.
- A host team will be established to interact with the inspection team to provide technical, treaty, and U.S. Government policy support throughout the inspection process. Elements of this team will assist in preparing the site.

For more information on CWC inspections and notification, contact the On-Site Inspection Agency's Security Office at 1-800-415-2899 and ask for the DTIRP Industry Outreach Program Manager.

Notes

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